cent; nonprofit organizations, 5 percent; and Federal contract research centers, 3 percent. Each of these organizational types has a relatively unique, although not mutually exclusive, role to play in satisfying DOD requirements.

We have often asked ourselves the question, Why do we need inhouse laboratories? Among the evident reasons underlying their need

are-

1. The maintenance of national competence during peacetime, as well as times of conflict, in those areas of technology peculiar to military needs.

2. The necessity for maintaining a continuity of effort, free from commercial pressures and directed toward the conception

and evolution of advanced weapon systems.

3. The need for competent in-house skills that can direct, moni-

tor, and assess the performance of DOD contractors.

4. The requirement of having available to the military services a fast-reaction capability to solve critical, immediate problems that arise in connection with existing operational weapon systems, or when unexpected combat situations are encountered such as that currently existing in Southeast Asia.

## DOD ACTIONS TO IMPROVE THE EFFECTIVENESS OF LABORATORIES

Many of the others who have testified before this subcommittee have highlighted many of the administrative problems of Federal laboratories. We have had our share of them also.

During the past 2 years we have had a concerted effort underway to improve the effectiveness of our in-house laboratories. The problems of our laboratories as we saw them when we started this effort can be stated rather simply:

1. Many laboratories have not been as heavily involved as they should be in the overall weapon planning process and in urgent mili-

tary problems.
2. In many cases the laboratory structure was too fragmented to

take on meaningful programs in an integrated way.

3. They did not possess the administrative flexibility to respond rapidly to changing needs, the changing state of technology, and changing nature of new tasks.

What are the rudiments of our strategy for dealing with these questions? We have attacked these problems, quite successfully I might

add, by-

(a) Assigning important military missions and weapon plan-

ning responsibilities to major laboratories.

(b) We are taking some steps and planning orders to restructure fragmented organizations into more cohesive structures and centers with more meaningful missions.

(c) We have identified a number of administrative problems which inhibit the effectiveness of defense laboratories and have

worked hard to develop solutions for them.

With your permission, Mr. Chairman, I would like to insert for the record, as tab A\* some detailed information on the steps we have taken or which are underway.

Mr. Daddario. You may, of course, Doctor.

<sup>\*</sup>Tab A appears starting on p. 171.